

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application. Please add new claim 14 as follows:

**LISTING OF CLAIMS:**

1. (Previously Presented) An apparatus for X-ray analysis comprising:  
a focusing optical system formed by arranging an X-ray source adapted to generate X-rays, specimen supporting means for supporting a specimen and two-dimensional X-ray detecting means for detecting X-rays from the specimen so as to satisfy requirements of the focusing optical system;  
means for shifting an angle of incidence of X-rays relative to the specimen by rotating said specimen or said X-ray source around a central axis of rotation passing through a surface of the specimen;  
means for moving said two-dimensional X-ray detecting means in parallel with said central axis of rotation; and  
a mask arranged at a position in front of said two-dimensional X-ray detecting means as viewed from said specimen and having a slit on a line intersecting a plane rectangularly intersecting said central axis of rotation and containing a central optical axis of incident X-rays.

2. (Previously Presented) An apparatus according to claim 1, further comprising:  
X-ray beam switching means adapted to switch an X-ray beam striking the specimen from a divergent beam to a parallel beam or vice versa.

3. (Original) An apparatus according to claim 2, further comprising:  
mask supporting means arranged so as to allow said mask to move between  
a first position located in front of said two-dimensional X-ray detecting means and a  
second position not located in front of said two-dimensional X-ray detecting means  
as viewed from said specimen.

4. (Original) An apparatus according to claim 1, wherein the shift of the  
angle of incidence of X-rays relative to the specimen and the parallel movement of  
said two- dimensional X-ray detecting means are synchronized with each other.

5. (Original) An apparatus according to claim 2, wherein the shift of the  
angle of incidence of X-rays relative to the specimen and the parallel movement of  
said two- dimensional X-ray detecting means are synchronized with each other.

6. (Original) An apparatus according to claim 3, wherein the shift of the  
angle of incidence of X-rays relative to the specimen and the parallel movement of  
said two- dimensional X-ray detecting means are synchronized with each other.

7. (Previously Presented) An apparatus according to claim 1, wherein  
an X-ray receiving surface of said two-dimensional X-ray detecting means is  
that of a cylinder formed around the central axis of rotation.

8. (Previously Presented) An apparatus according to claim 2, wherein an X-ray receiving surface of said two-dimensional X-ray detecting means is that of a cylinder formed around the central axis of rotation.

9. (Previously Presented) An apparatus according to claim 3, wherein an X-ray receiving surface of said two-dimensional X-ray detecting means is that of a cylinder formed around the central axis of rotation.

10. (Previously Presented) An apparatus according to claim 4, wherein an X-ray receiving surface of said two-dimensional X-ray detecting means is that of a cylinder formed around the central axis of rotation.

11. (Previously Presented) An apparatus according to claim 5, wherein an X-ray receiving surface of said two-dimensional X-ray detecting means is that of a cylinder formed around the central axis of rotation.

12. (Previously Presented) An apparatus according to claim 6, wherein an X-ray receiving surface of said two-dimensional X-ray detecting means is that of a cylinder formed around the central axis of rotation.

13. (Previously Presented) A method for X-ray analysis in which X-rays are emitted from an X-ray source to strike a specimen in a form of either a divergent beam or a parallel beam, and X-rays which emerge from said specimen are detected by a two-dimensional X-ray detecting means, said method having a measuring step

using said divergent beam, said measuring step using said divergent beam

comprising the steps of:

shifting an angle of incidence of X-rays striking said specimen by rotating either said specimen or said X-ray source around a central axis of rotation running through a surface of the specimen;

arranging a mask having a slit in front of said two-dimensional X-ray detecting means so as to make the slit to be located on a line intersecting a plane rectangularly intersecting said central axis of rotation and containing a central optical axis of incident X-rays; and

moving said two-dimensional X-ray detecting means in parallel with said central axis of rotation in synchronism with the shift of the angle of incidence of X-rays relative to the specimen.

14. (New) A method for X-ray analysis in which an X-ray striking a specimen is switched from a divergent beam formed by a diverging slit to a parallel beam formed by a collimator or vice versa, and X-rays which emerge from said specimen are detected by a same two-dimensional X-ray detecting means, wherein

a step of using said divergent beam comprising the steps of:

shifting an angle of incidence of X-rays striking said specimen by rotating either said specimen or said X-ray source around a central axis of rotation running through a surface of the specimen;

arranging a mask having a slit in front of said two-dimensional X-ray detecting means so as to make the slit to be located on a line intersecting a plane

rectangularly intersecting said central axis of rotation and containing a central optical axis of incident X-rays; and

moving said two-dimensional X-ray detecting means in parallel with said central axis of rotation in synchronism with the shift of the angle of incidence of X-rays relative to the specimen.